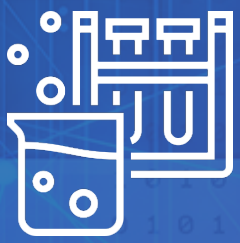
Lab Assignment
& Solution



Cybersecurity Professional Program

Introduction to Python
for Security

Introduction to Programming

PY-01-LS1
Installing Python

Note: Solutions for the instructor are shown inside the green box.

Lab Objective

Learn how to install Python3 and PyCharm on Windows OS.

Lab Mission

Install Python and PyCharm Community Edition on your Windows system.

Lab Duration

15–20 minutes

Requirements

- Basic working knowledge of the Windows OS
- Basic working knowledge of software installation

Resources

- Environment & Tools
  - Windows, MacOS
    - Python 3
    - PyCharm
- Extra Lab Files
  - ***python-3.8.5-amd64.exe*** (for Windows)
  - ***pycharm-community-2020.2.1.exe***

Alternatively, you can download resources from the sites below. Preferably, you will download the files from Canvas for version control.

- ***https://www.python.org/downloads/***
- ***https://www.jetbrains.com/pycharm/download/***

Textbook References

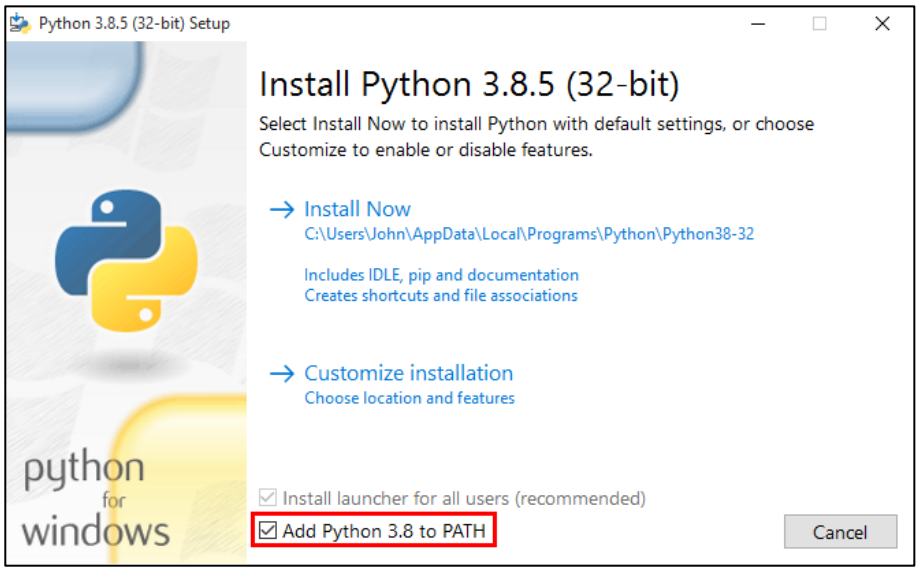
- Chapter 1: Introduction to Programming
  - Section 2: Python Installation
  - Section 3: Python IDE
  - Section 4: Python Environment and PyCharm

Lab Task 1: Downloading Python & PyCharm

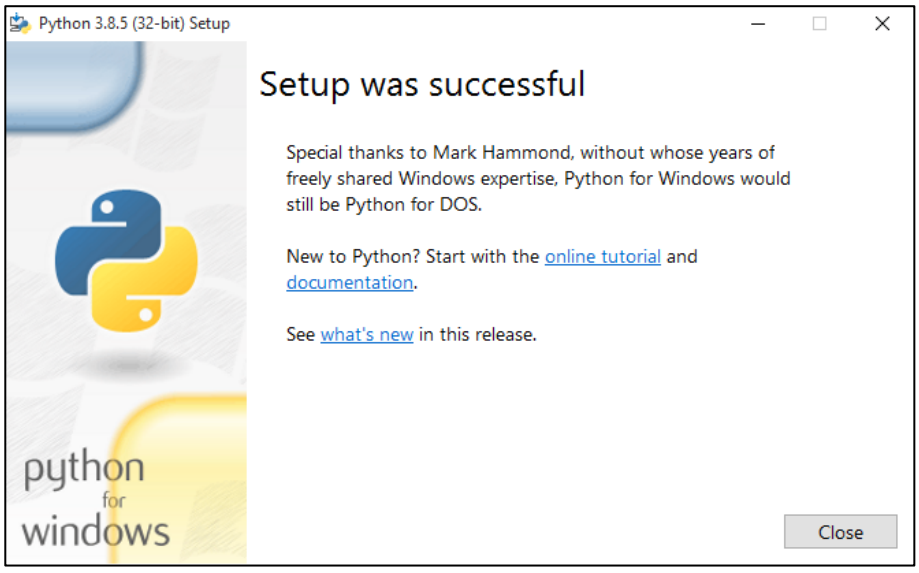
In this task, you will install Python 3 and PyCharm.

1. Download ***python-3.8.5-amd64.exe*** from Canvas.
2. Run the provided Python installation file (***python-3.8.5-amd64.exe***).

   Note: macOS users can skip to step 5.
3. Select ***Add Python to PATH*** and click **Install Now**.



4 Click **Close** when the installation ends.

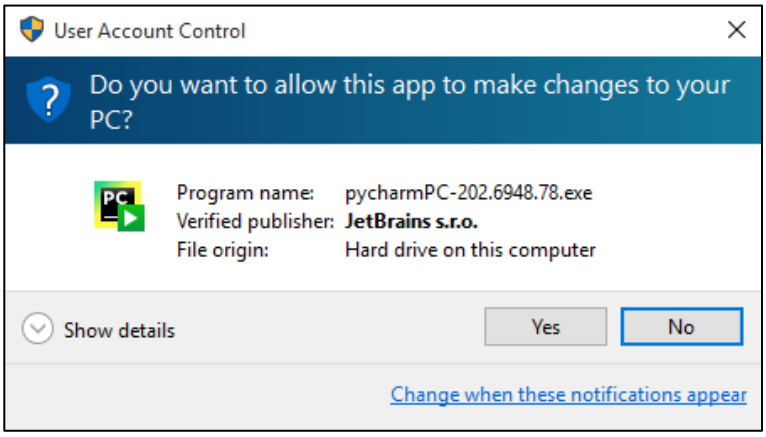


5 Download ***pycharm-community-2020.2.1.exe*** from Canvas.

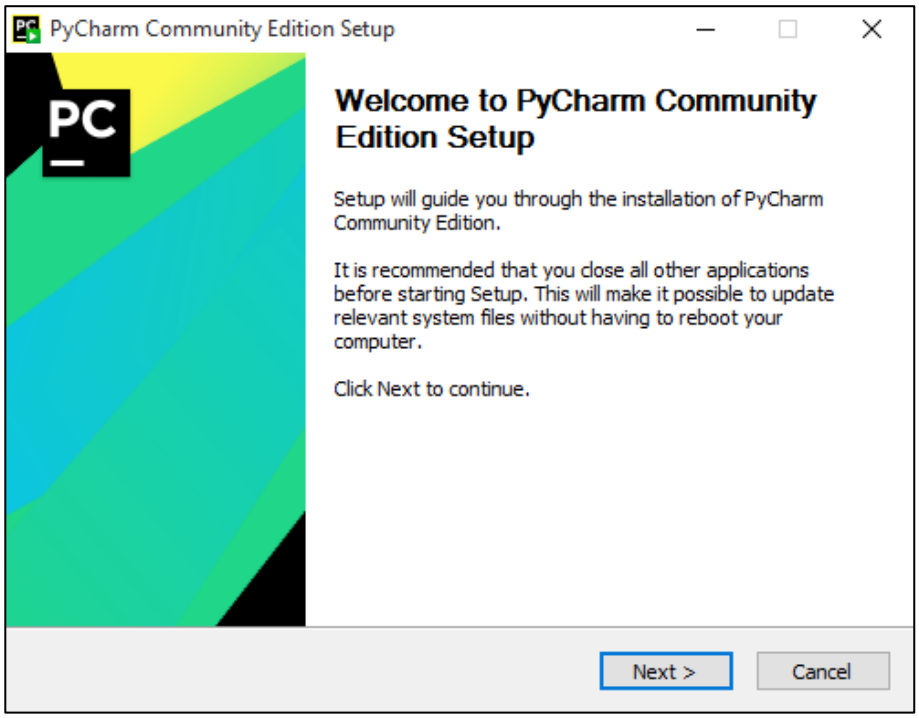
6 Run the provided PyCharm installation file (***pycharm-community-2020.2.1.exe***).

Note: The process for macOS users is different since working with that OS requires knowledge of how to work with DMG files.

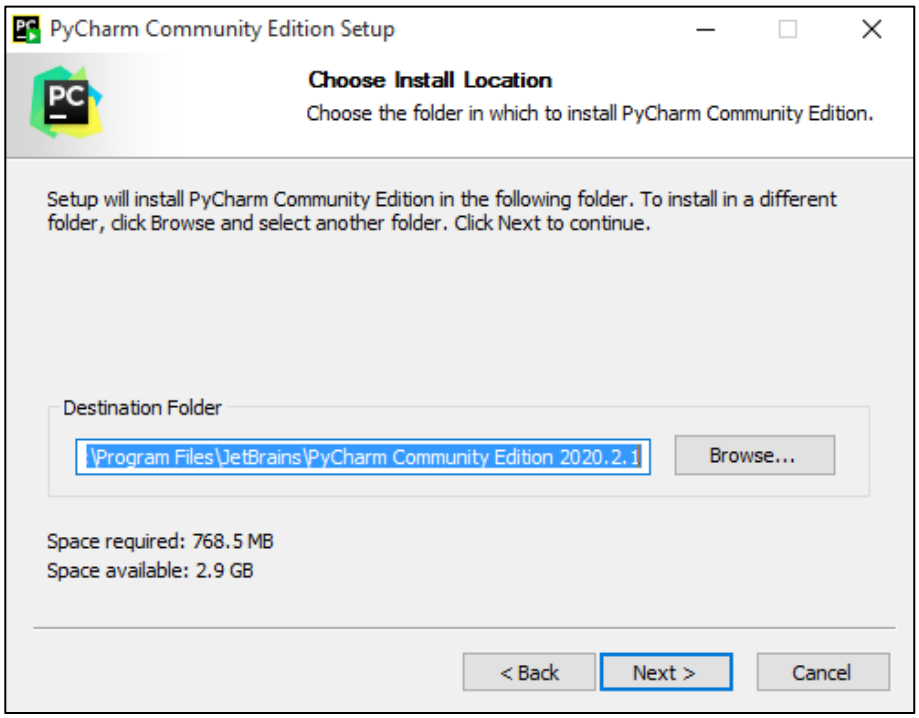
7 Click **Yes** when prompted with a request to make changes.



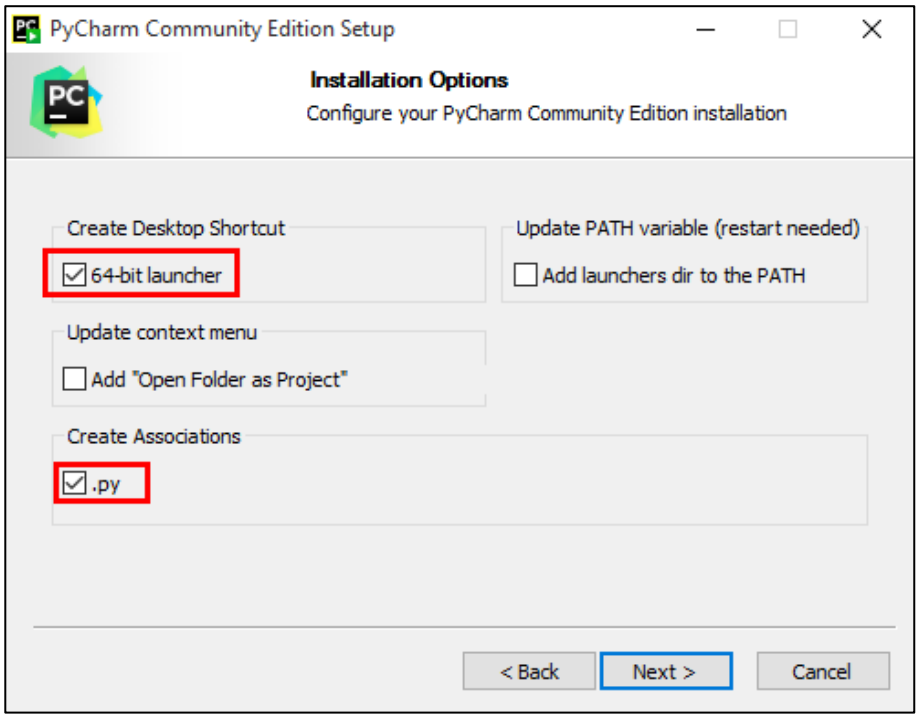
8 Click **Next** in the **Welcome** window.



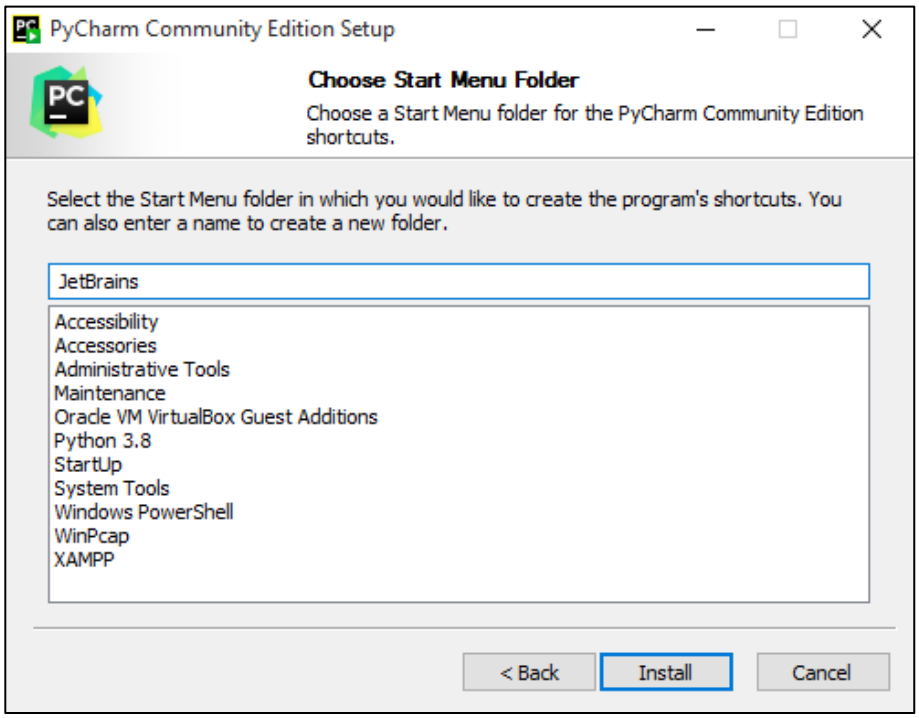
9 Select the destination for installation and click **Next**.



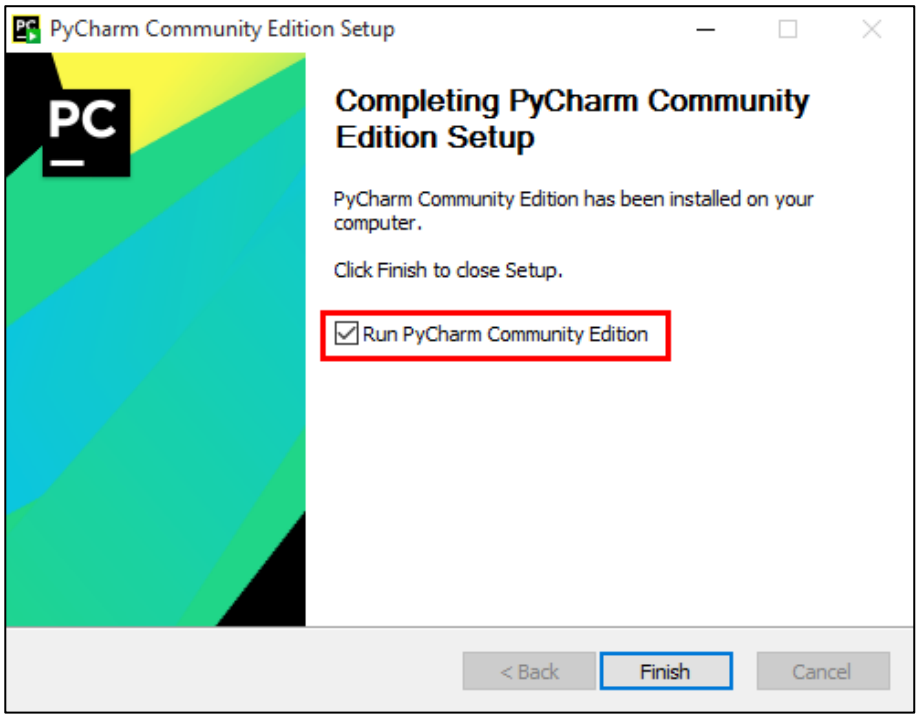
10 Select ***64-bit launcher*** and ***.py*** and click **Next**.



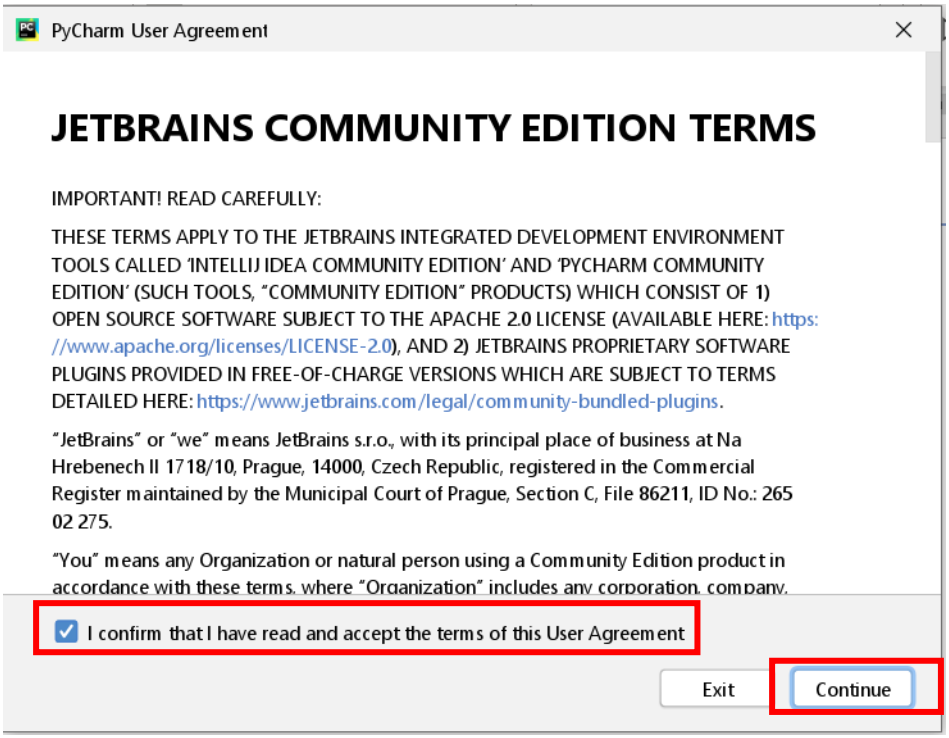
11 In the **Choose Start Menu Folder** window, click **Install**.



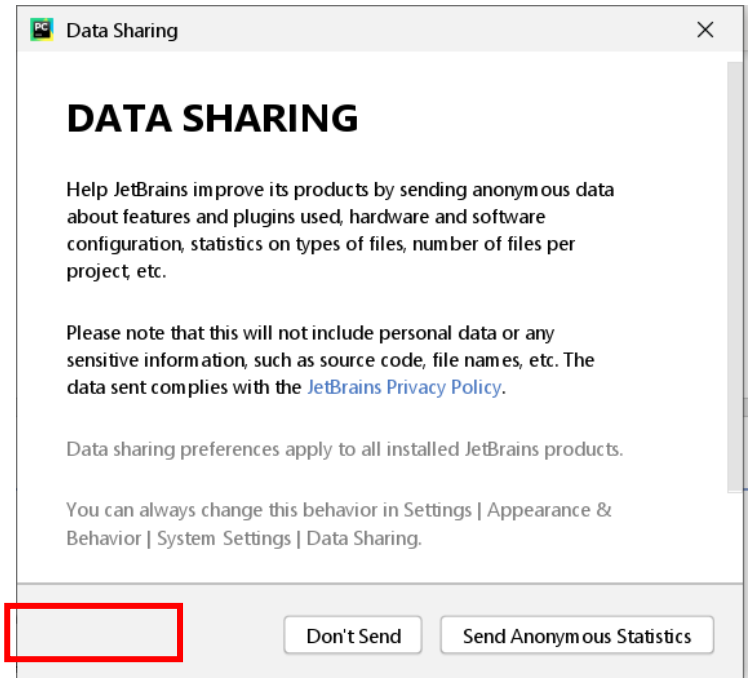
12 Select ***Run PyCharm Community Edition*** and click **Finish**.



13 Check the box to confirm the user agreement for PyCharm and click **Continue**.



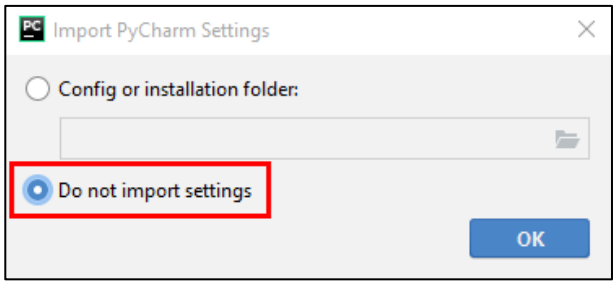
14 Click **Don’t Send** to continue the installation.



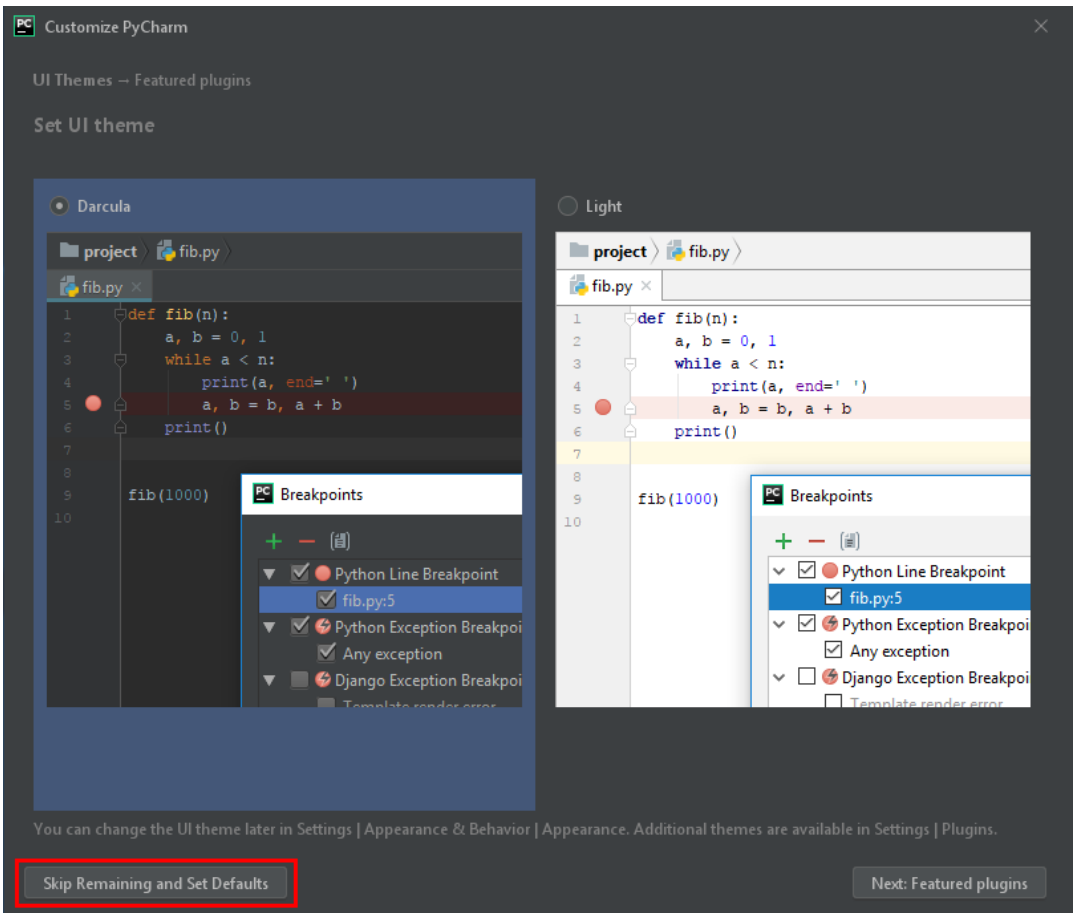
Lab Task 2: Project Creation

In this task, you will create a new project in PyCharm and configure its interpreter.

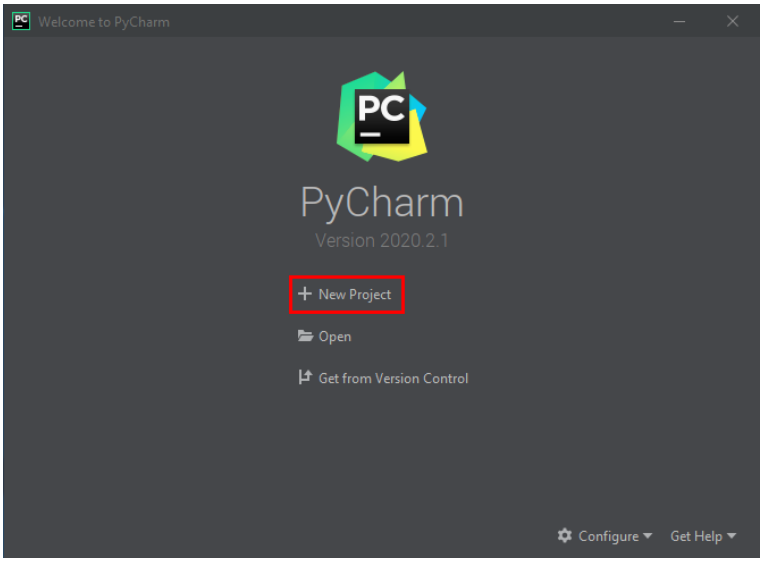
1 When PyCharm loads for the first time, it will provide an option to import settings. Select ***Do not import settings*** and click **OK**.



2 In the **UI theme customization** window, select your preferred theme (Darcula is easy on the eyes) and click **Skip Remaining and Set Defaults**.

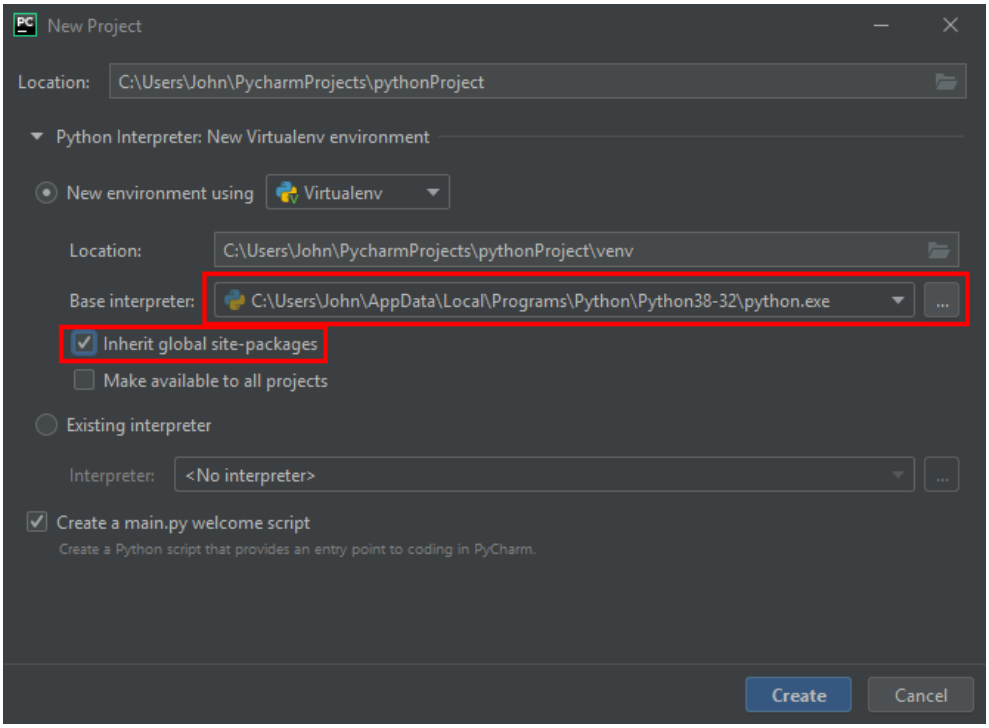


3 Click **New Project**.

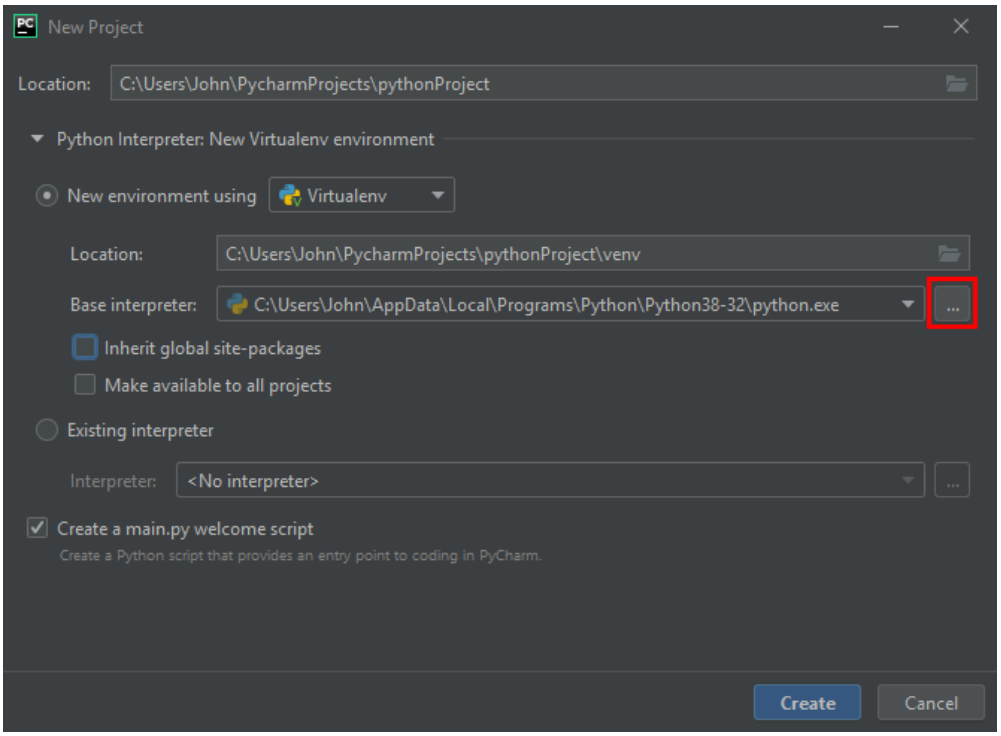


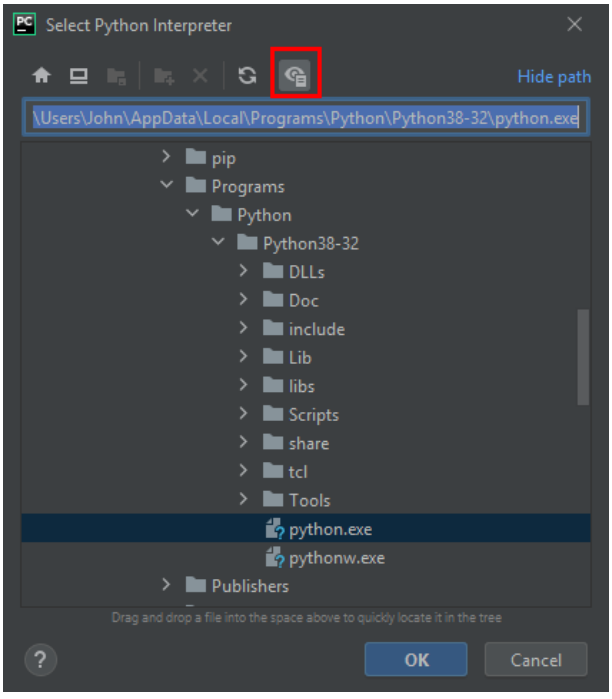
4 Name the project (use the last part of the location's name), and make sure the base interpreter is set to the Python version that was installed at the beginning of the lab.

Tip: Select ***Inherit global site-packages*** to ensure all modules that come with Python 3 are available for the virtual environment (venv) project.



5 If the data shown in the previous step does not appear, do the following. Under **Base interpreter**, click **Browse**, then click the *Hide* icon to view hidden folders. Afterward, go to ***C:\Users\[user]\AppData\Local\Programs\Python\Python38-32\python.exe***.





6 PyCharm will create a Python file named ***main.py*** with a sample script and basic instructions. To create your own Python file, right-click the project name, select **New**, and then select **Python File**. Name the file and click **Enter**.